

REMARKS

Claims 33 and 34 have been rejected under 35 U.S.C. §112, first paragraph, for allegedly failing to comply with the written description requirement. In particular, paragraph 3 of the Office Action states that the disclosure does not adequately describe the limitations of Claim 33 pertaining to embedding a predetermined acoustic signal within a sound track which is transmitted to an entertainment device, where the entertainment device is a cinema system.

In response to this ground of rejection, Applicants have amended Claim 33 such that the step of transmitting the sound track to the entertainment device has been eliminated. The claim now recites simply that the entertainment device emits the predetermined acoustic signal in audible form. Applicants respectfully submit that Claim 33 as amended is thus clearly and fully supported by an adequate disclosure, including the portions of paragraphs 10 and 11 referred to at page 12 of the amendment submitted March 16, 2004. In particular, the process by which sound track signals are emitted by radio, television and cinema devices are known to those skilled in the art, as is the process by which a predetermined information can be incorporated into such a signal. Since radio, television and cinema are well known entertainment devices, and since Claim 33 specifically recites that the entertainment device comprises

one of these three modes, the recitation of the generic term "entertainment device" is believed to be proper.

Claims 21, 23, 25 and 27-34 have been rejected under 35 U.S.C. §102(b) as anticipated by Tognazzini (U.S. Patent No. 5,708,478), while Claims 22, 24 and 26 have been rejected under 35 U.S.C. §103(a) as unpatentable over Tognazzini in view of Robbins et al (U.S. Patent No. 6,147,713) and Crossland et al (GB 2 149 554). However, for the reasons set forth hereinafter, Applicants respectfully submit that all claims which remain of record in this application distinguish over the cited references, whether considered separately or in combination.

The present invention is directed to an acoustically activated device which can be worn by an individual, and which displays predetermined message information in response to the recite of predetermined acoustic signals. In particular, the device according to the invention may be worn by a consumer as a badge, while at the cinema, or while listening to the radio or TV, as described at paragraph [0003] of the specification. When the acoustic information detected by the device detects the receipt of predefined data, it activates the device to display predefined information.

The present invention as claimed responds to a predefined acoustically propagated signal (that is, a sequence of pressure waves transmitted in the air), and displays predetermined information in response to such predefined acoustically propagated signal. Thus, for example, Claim 1 recites an apparatus

for displaying information which includes display means and activation means coupled to the display means for causing the display means to display defined information upon reception of predefined acoustically propagated data broadcast by a commercial broadcast source, with the commercial broadcast source being a commercial radio broadcaster or a commercial television broadcaster. Claim 32 recites in somewhat greater detail that the apparatus includes means for receiving an acoustically propagated signal derived from commercially broadcast information and the means for comparing the content of the acoustically propagated signal with a stored predefined signal content. Upon detection of a match between the acoustically propagated signal and a predefined signal content, a predetermined information signal is output, either visually or audibly.

Claim 33, on the other hand is a method claim which recites steps of embedding a predetermined acoustic signal within a sound track that is to be emitted by an entertainment device. The acoustic signal, emitted by the entertainment device is compared with a predefined signal and predefined information is displayed upon detection of a match between the acoustic signal and a predefined signal.

Finally, new Claim 35 recites a method of displaying information which includes the steps of a person wearing a badge which is capable of detecting input acoustic information and displaying visual indications. Upon determination by a processor contained in the badge that predefined acoustic

information has been received, a predetermined visual indicator associated with a predefined acoustic information as displayed.

The latter features of the invention are neither taught nor suggested by any of the cited references.

Tognazzini discloses a system which receives and responds to electrical signals representing radio or TV transmissions. This reference does not, however, describe a system in which a sound track is converted into an acoustically propagated signal, and wherein a device responds to a predefined acoustically propagated signal (that is, a sequence of pressure waves transmitted in the air) and generates a predetermined information signal. Accordingly, Tognazzini does not include "activation means" for causing a display unit to display predefined information upon reception of predefined acoustically propagated data broadcast by a commercial broadcast source". Rather, Tognazzini merely extracts and stores commercials contained in radio or TV signals, which a user can retrieve and display by actuating buttons 23-26. Accordingly, this reference also fails to teach or suggest a system in which activation means causes a display means to display predefined information in response to reception of predefined acoustically propagated data. Rather, as noted, the electronically transmitted data are simply stored for display at the request of the operator.

The Office Action refers to Figure 6 of Tognazzini for evidence of the disclosure of reception of acoustically propagated signals. However, Figure 6 shows a flow chart of operations performed within a computer for extracting data (not being predetermined data in the sense that it is already known by the receiving device) from decoded AM/FM or TV signals. As these processes operate within the computer, the data treatment will be performed on electrical signals resulting from decoding of the AM/FM or TV signals. No acoustically propagated signals are generated or detected in the system represented by Figure 6 of Tognazzini. In this regard, Applicants refer to Figure 4 of Tognazzini, which clearly shows all operations from communications port to display device taking place internally within the computer. Column 5, lines 45-67 of Tognazzini also requires operation to be upon electrical AM/FM or TV signals, since super or supra audible frequencies, or TV vertical retrace signals may be used. Such signals are not acoustically propagated as required by the claims of the present invention.

With regard to Claims 22, 24 and 26, the Office Action cites the Robbins et al and Crossland et al references, noting that Tognazzini fails to disclose having an analog to digital converter including specific integrated circuit in a programmable digital processor. While the latter is of course true, it is important to note that there would be no particular utility in providing an analog to digital converter in the Tognazzini apparatus, nor would such a modification

of Tognazzini result in the invention as defined in the claims, for the reason set forth above.

That a display device of some sort may be connected to an A/D converter for some reason, or may include a specific integrated circuit or a programmable digital processor is not, of course, in dispute, and is shown by Robbins et al. Similarly, the fact that a display may be an LCD, or may include a battery, is also disclosed by Crossland et al. The embodiments of Crossland et al shown in Figures 6 and 7 will of course, include a microphone. Those embodiments are telephones. The embodiment of Figure 9 is a pager, and is not likely to include a microphone. The fact that a telephone includes a microphone does not provide a basis, however, for rejecting the claims of the present application, for the reasons noted previously. That is, the microphone in Crossland et al is not used to cause a device to respond to predefined acoustically propagated data in order to trigger the display of predefined information, nor does anything in Crossland et al suggest such an apparatus.


To summarize, none of the features contained in Robbins et al or Crossland et al, when combined with Tognazzini, would suggest the feature of the present invention that the claimed device responds to a predefined acoustically propagated signal (a sequence of pressure waves transmitted in the air), to trigger the display of predefined messages or information. Nor is there any particular utility in such a combination, as the device in Tognazzini, as

noted previously, merely extracts and stores commercials and the information contained therein for subsequent display to an operator of the system.

In light of the foregoing remarks, this application should be in condition for allowance, and early passage of this case to issue is respectfully requested. If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #3036/49686).

Respectfully submitted,



Gary R. Edwards
Registration No. 31,824

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844
GRE:kms
336135v1